Adventures in Aeronautics
2007 Mathematics
Standards

Oregon Mathematics			
Grade 3			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	OR	MA.3.3.2.1	Represent and apply the concept of multiplication as repeated addition.
Adventures in Aeronautics	OR	MA.3.3.2.3	Apply models of multiplication (e.g., equal-sized groups, arrays, area models, equal "jumps" on number lines and hundreds charts) and division (e.g., repeated subtraction, partitioning, and sharing) to solve problems.
Adventures in Aeronautics	OR	MA.3.3.2.6	Represent, analyze and extend number patterns using rules that involve multiplication and/or addition (e.g., {3, 6, 9, 12, ...},.{1, 2, 4, 8, ...}).
Adventures in Aeronautics	OR	MA.3.3.2.7	Analyze frequency tables, bar graphs, picture graphs, and line plots; and use them to solve problems involving addition, subtraction, multiplication, and division.

Adventures in Aeronautics
2007 Mathematics
Standards

Oregon Mathematics			
Grade 4			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	OR	MA.4.4.2.2	Apply understanding of models for multiplication (e.g., equal-sized groups, arrays, area models, equal intervals on the number line), place value, and properties of operations (commutative, associative, and distributive).
Adventures in Aeronautics	OR	MA.4.4.2.3	Select and use appropriate estimation strategies for multiplication (e.g., use benchmarks, overestimate, underestimate, round) to calculate mentally based on the problem situation when computing with whole numbers.
Adventures in Aeronautics	OR	MA.4.4.2.4	Develop and use accurate, efficient, and generalizable methods to multiply multi-digit whole numbers.
Adventures in Aeronautics	OR	MA.4.4.2.5	Develop fluency with efficient procedures for multiplying multi-digit whole numbers and justify why the procedures work on the basis of place value and number properties.
Adventures in Aeronautics	OR	MA.4.4.3.5	Connect area measure to the area model used to represent multiplication and use this to justify the formula for area of a rectangle.

Adventures in Aeronautics
2007 Mathematics

Standards			
Oregon Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Adventures in Aeronautics	OR	MA.5.5.2.1	Apply understanding of models for division (e.g., equal-sized groups, arrays, area models, equal intervals on the number line) and the relationship of division to multiplication to solve problems.